

WHAT IS CLAIMED IS:

1 ~~1. An edge enhancement processing system for modifying image data~~
2 at certain pixel locations to include gray scale image data so as to reduce
3 jaggedness in the image, the system comprising:

4 an adjustable threshold device that establishes a current binary
5 pixel value for an incoming current gray level pixel in accordance with a
6 thresholding criterion;

7 an operator accessible input to the threshold device for adjusting a
8 threshold value in the thresholding criterion; and

9 an edge enhancement image processing device that examines the
10 current binary pixel and neighboring binary pixels in accordance with
11 predetermined criteria for determining adjustment of the current pixel to a
12 gray scale value to reduce edge jaggedness of the image.

1 2. An edge enhancement method for processing image data
2 comprising:

3 determining an adjustable threshold value in a thresholding
4 criterion in response to an input from an operator;

5 establishing a current binary pixel value for an incoming current
6 gray level pixel in accordance with the thresholding criterion that employs
7 the threshold value ;

8 examining a current binary pixel and neighboring pixels thereto in
9 accordance with predetermined criteria to determine an adjustment of the
10 current binary pixel to a gray scale value to reduce edge jaggedness of the
11 image; and

12 substituting the gray scale value for the current binary pixel to
13 reduce edge jaggedness of the image.

1 3. The method according to claim 2 wherein the image data is color
2 separation image data that has been subjected to under color removal and/or gray
3 component replacement before being transformed into a binary pixel.

1 4. The method according to claim 3 and including providing an
2 operator adjustable modification of the strength of the gray scale value substituted
3 for the current binary pixel.

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1 5. ~~The method according to claim 2 wherein the image data is color~~
2 separation image data that has been subjected to a color transformation process
3 ~~before being transformed into a binary pixel.~~

1 6. The method according to claim 5 and including providing an
2 operator adjustable modification of the strength of the gray scale value substituted
3 for the current binary pixel.

1 7. ~~The method according to claim 2 wherein the adjustable threshold~~
2 value is determined in accordance with a selection by the operator of a color
3 image processing that includes under color removal and/or gray component
4 replacement.

1 8. An edge enhancement method for processing image data
2 comprising:

3 processing image data using under color removal and/or gray
4 component replacement; and

5 adjusting edge enhancement processing of the image data in
6 accordance with whether or not under color removal and/or gray
7 component replacement is used or the extent of such use.

1 9. The method according to claim 8 wherein the adjustment
2 comprises adjustment of a threshold value used for comparing image data
3 processed by under color removal and/or gray component replacement.

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